DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

(707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.21

WELDING WITNESS REPORT

Resident Engineer: Pursell, Gary **Report No:** WWR-000164 Address: 333 Burma Road **Date Inspected:** 29-Mar-2007

City: Oakland, CA 94607

OSM Arrival Time: 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Contractor: Location:** Shanghai, China

Witness: **Procedure Qualification Record Welder Qualification Fracture Critical**

> Mechnical Testing, describe: side bend, reduced section Welding **NDT**

> > tension and macroetch

specimens.

Index Lot #: B71-014-07a Witness Lot #: B49-019-07

Bridge No: 34-0006 **Component:** Bid: 52,55 Tower & Girder

Welder: Zhang Xing Jin/SAW; Jiang Xiao Hu/FCAWID #: N/A

B-U2a-GF WPS ID #: N/A **Joint Description:** N/A PWPS-B-T-223(2)1T-1 **Base Metal:** A709-Gr 50-2/Z25 N/A POR ID#: HP200712 N/A FCAW + SAWThickness: 60 mm **Process:** N/A N/A Electrode Spec/Class: See Below N/A **Positions:** 1-G N/A A709MCeramic JN 401 CWI: N/A **Backing Material:** N/A Liu Liu and Huang Wei **Average Amps:** N/A **AWS Code:** AWS D1.5 (2002) N/A **Average Volts:** N/A Applicable Sec: AWS 5.13 N/A **Travel Speed:** N/A **Heat Input:** N/A

Preheat: N/A

Summary of Items Observed:

: Caltrans Quality Assurance (QA) Inspector was present as requested by ZPMC Quality Assurance Manager, Mr. Lui Lui to witness the mechanical testing for procedure qualification (PQR) testing of HP200712. The PQR test plate was welded in the 1G position using the flux core arc welding (FCAW) and submerged arc welding (SAW) process. The welding consumable for the FCAW root and three filler pass welds is identified as a 1.4mm diameter electrode, AWS specification A5.20 and classification E71T1. The SAW welding consumable is identified as a 4.8mm electrode, AWS specification A5.17, classification EH14 and S-777MXH (F7A(P)2) type flux. The mechanical testing was performed in accordance with AWS D1.5 section 5.13, figure 5.3 requirements. The weld test specimens appeared to comply with the contract documents.

Summary of Conversations:

At 0900 hours. ZPMC Quality Control Inspector, Mr. Hu Gang met with Caltrans QA and stated that ZPMC would be performing mechanical for PQR HP200712 at 0930 hours. At 0930 hours Caltrans was present to witness the mechanical testing.

WELDING WITNESS REPORT

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is in general conformance with the contract requirements.

Observed welding, testing or results:

is not in conformance with the contract requirements.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler,Mike	Quality Assurance Inspector
Reviewed By:	McClary, David	QA Reviewer